

Electronic multi-entry identification key for selected fruit flies (Diptera, Tephritidae, Dacinae) of economic importance

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Recently, the Royal Museum for Central Africa (Belgium) in collaboration with Stellenbosch University (South Africa) put together two multi-entry identification keys for selected groups of fruit flies.

The first one contains characters to differentiate between adults of 29 fruit fly species of the subfamily Dacinae, that are considered of economic importance to agriculture and horticulture in Sub-Saharan Africa. This key is composed within the framework of the STDF (Standards and Trade Development Facility) project F³ Fruit Fly Free: Establishment and maintenance of fruit production areas free and under low prevalence of fruit fly pests in southern Africa. It includes all major pest species of the genera *Bactrocera*, *Ceratitis*, *Dacus*, *Trirhithrum* and

Zeugodacus regularly encountered in surveying, detection and pest control activities.

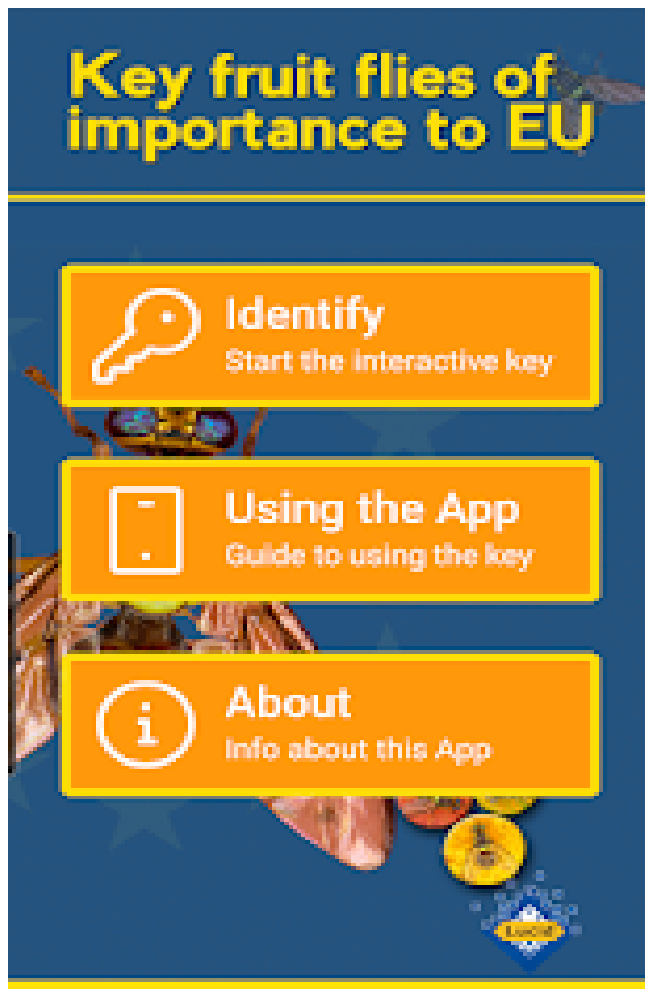
The key provides subsets of species for different geographic regions on the continent (western, central, eastern, southern Africa) as well as the islands of the Western Indian Ocean. In addition, for each species a condensed

datasheet is provided with the basic information regarding morphology, biology, host range, distribution, impact and management. Also, links to more extended information sources have been included for each species.

The second one



provides a key for a selection of fruit flies (in the genera *Ceratitis*, *Bactrocera*, *Dacus* and *Zeugodacus*) that are considered of significance for quarantine measures in the European Union region and associated regions. This key is composed within the framework of the EU H2020 project “FF-IPM” (In-silico boosted pest prevention off-season focus IPM against new and emerging fruit flies, H2020 grant agreement Nr 818184. See <https://fruitflies-ipm.eu/>). In all, twenty-three species are included. This shortlist was composed after consultation with different potential end-users (NPPOs, the European Reference Laboratories for Insects and Mites, EPPO),



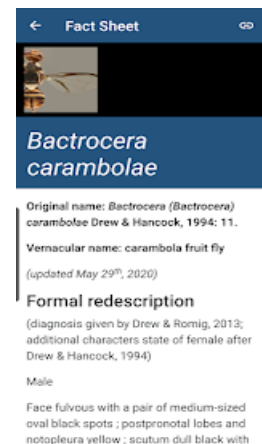
and includes the three target fruit flies (*Bactrocera dorsalis*, *B. zonata* and *Ceratitis capitata*) of the FF-IPM project. As in the first key, also here for each species a condensed datasheet with similar information and links to more extended information sources have been included.

Both keys are now converted to mobile applications (through the LUCID company) that can be installed on smartphones. They are downloadable for free. You can find them in the different stores through the following links:

Key selected fruitflies Africa

https://play.google.com/store/apps/details?id=com.lucidcentral.mobile.fruit_flies_africa

<https://apps.apple.com/app/key-selected-fruitflies-africa/id1600205756>



Key important fruit flies EU

https://play.google.com/store/apps/details?id=com.lucidcentral.mobile.fruit_flies_ffipm

<https://apps.apple.com/app/key-important-fruit-flies-eu/id1600191559>